Ducati 2 HD

# SERVICE GUIDE

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## Revision History

Please refer to the table below for the updates made on this service guide.

| Date | Chapter | Updates |
|---|---|---|
| | | |
| | | |
| | | |

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## Conventions

The following conventions are used in this manual:

**WARNING:**

Indicates a potential for personal injury.

**CAUTION:**

Indicates a potential loss of data or damage to equipment.

**IMPORTANT:**

Indicates information that is important to know for the proper completion of a procedure, choice of an option, or completing a task.

**NOTE:**

Gives bits and pieces of additional information related to the current topic.

The following typographical conventions are used in this document:

- Book titles, directory names, file names, path names, and program/process names are shown in italics.

  Example:

  *the DRS5 User's Guide*
  */usr/local/bin/fd*
  *the /TPH15spool_M program*

- Computer output (text that represents information displayed on a computer screen, such as menus, prompts, responses to input, and error messages) are shown in constant width.

  Example:

  ```
  [01] The server has been stopped
  ```

- User input (text that represents information entered by a computer user, such as command names, option letters, and words) are shown in constant width **bold**. Variables contained within user input are shown in angle brackets (< >).

  Example:

  At the prompt, type run **<file name> -m**

- Keyboard keys are shown in bold italics.

  Example:

  After entering data, press ***Enter***.

- Screen output (text that represents information displayed on the system, such as menus, prompts, responses to input, and error messages) are shown in bold.

  Example:

  On the main menu, select **OK**.



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# General Information

This Service Guide provides you with all technical information relating to the basic configuration for Acer's global product offering. To better fit local market requirements and enhance product competitiveness, your regional office may have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capabilities). These localized features are not covered in this generic service guide. In such cases, contact your regional offices or the responsible personnel/channel to provide you with further technical details.

When ordering FRU parts:

Check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it may not be noted in this printed service guide.

For Acer-authorized service providers:

Your Acer office may have a different part number code than those given in the FRU list of this printed service guide. The list provided by your regional Acer office must be used to order FRU parts for repair and service of customer machines.



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CHAPTER 1

# Hardware Specifications and Configurations


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## Features

The following is a summary of the computer's many features:

### Form Factor

- 8" Tablet

### Operating System

- Android 4.4

### Platform

- CPU 1.83G 2.2W 592B BYT-CR 4 CORE Z3735G Intel

### System Memory

- RAM: DDR3L 1GB
- eMMC: 16GB

### Display

LCM

- O-film; FL080XW001; 8" 800 x 1280 LED backlight; MIPI interface

### Audio Subsystem

- Microphone
- Speaker:0.5 W*2
- 3.5mm 4 ring earphones

### Camera

Front Camera

Front camera: 2MP Camera with Fix Focus(GC2155)

Photo capture at 15fps @ 1600x1200 in JPEG

Video capture recording at 15fps @ 720pHD in 3gpformat

Rear camera

Rear camera : 5MP Camera with Auto Focus (OV5693)

Photo capture at 30fps @ 2560x1920 in JPEG

Video capture recording at 30fps @ 1080p in 3gp format



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## Connectivity

Wi-Fi

- 802.11 b/g/n (BCM43340)

Bluetooth

- Bluetooth 4.0(BCM43340)

USB

- 1 x Micro USB2.0 , support OTG

## Expansion Slot

MicroSD memory up to 64G(SD 2.0 compatible)

## Special Keys and Controls

- Capacitive Multi-Touch Screen
- Touch controller - 10 point support/ GFF H:1.12mm ( COB:FT5506 )
- Function buttons

  Side (mechanical key):
  - Volume Up, Volume Down
  - Power

  Sensors
  - (G Sensor+Gyro Sensor 2 in 1)- InvenSense MPU6515

## I/O Ports

MicroSD memory Card slot

Micro USB 2.0 Type B support OTG

Micro HDMI V1.4,720p 50/60, 1080p 24Hz, 2-chanel PCM, D-type

Headphone+Mic 3.5mm standard

## Dimensions and Weight

Dimension

- 215 (L) x 130 (W) x 8.5(T) mm

Weight

- <360g



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## Power Adapter and Battery

Battery

- Lithium-ion Polymer battery
- Capacity: 3.7V 17wh 4600 mAh

Power Adapter

- Voltage range/frequency: 100~ 240V AC, 50/60Hz
- DC output: 5.35V,2A

## Others

- Acer Micro-HDMI to VGA adapter (model name: NP.OTH11.004)

## Green Requirement

- Rohs compliance
- WEEE compliance
- SMT Green process



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# Tablet tour

## Front View

Figure 1-1. Front View

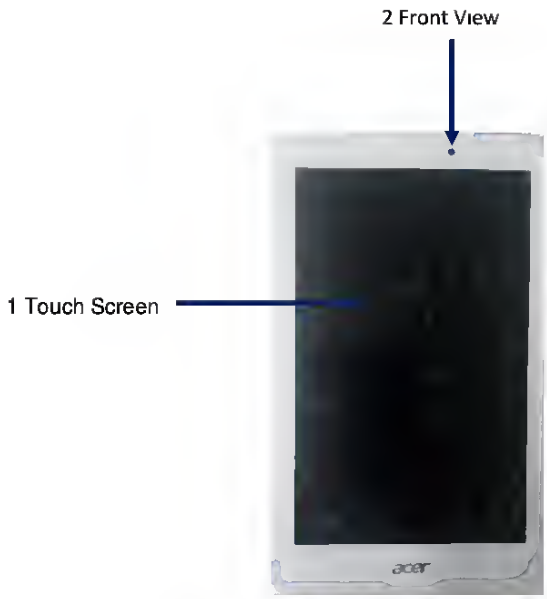


Table 1-1. Front View

| # | Item | Description |
|---|---|---|
| 1 | Touch Screen | 8inch ,1280x800 AUO 2.2mm 16:10,MIPI,Slim Type. |
| 2 | Front Camera | 2MP Camera with Fix Focus (GC2155) |



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## Rear View

Figure 1-2 Rear View

Table 1-2. Rear View

| # | Item | Description |
|---|---|---|
| 1 | Speakers | 2x Channel speaker 0.5W |
| 2 | Rear View | 5.0M Pixel Rear camera, Auto Focus (OV5693) |



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## Top View

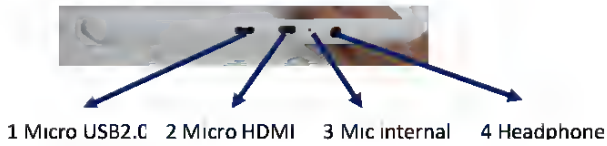


Figure 1-4. Bottom View

| # | Item | Description |
|---|---|---|
| 1 | Micro USB 2.0 | Micro USB2.0 ,Type B support OTG |
| 2 | Micro HDMI | HDMI output |
| 3 | Mic internal | Voice input device |
| 4 | headphone | Headphone+Mic 3.5mm standard |

## Left View

| # | Item | Description |
|---|---|---|
| 1 | TF card external | up to 64G |



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## Right View

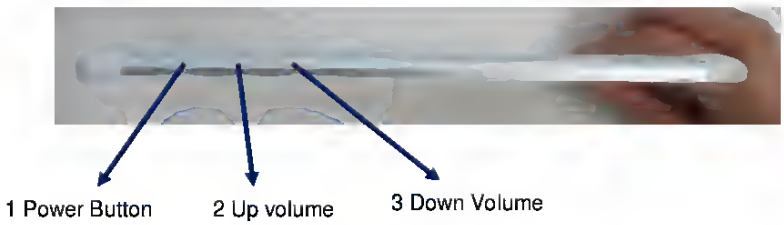


Figure 1-5 Right View

Table 1-5 Right View

| # | Item | Description |
|---|---|---|
| 1 | Power Button | • Press and hold to turn the tablet on or off<br>• Press briefly to turn the screen on/off or enter sleep mode. |
| 2 | Up volume | Increases the tablet volume |
| 3 | Down Volume | decreases the tablet volume. |



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# System Block Diagram

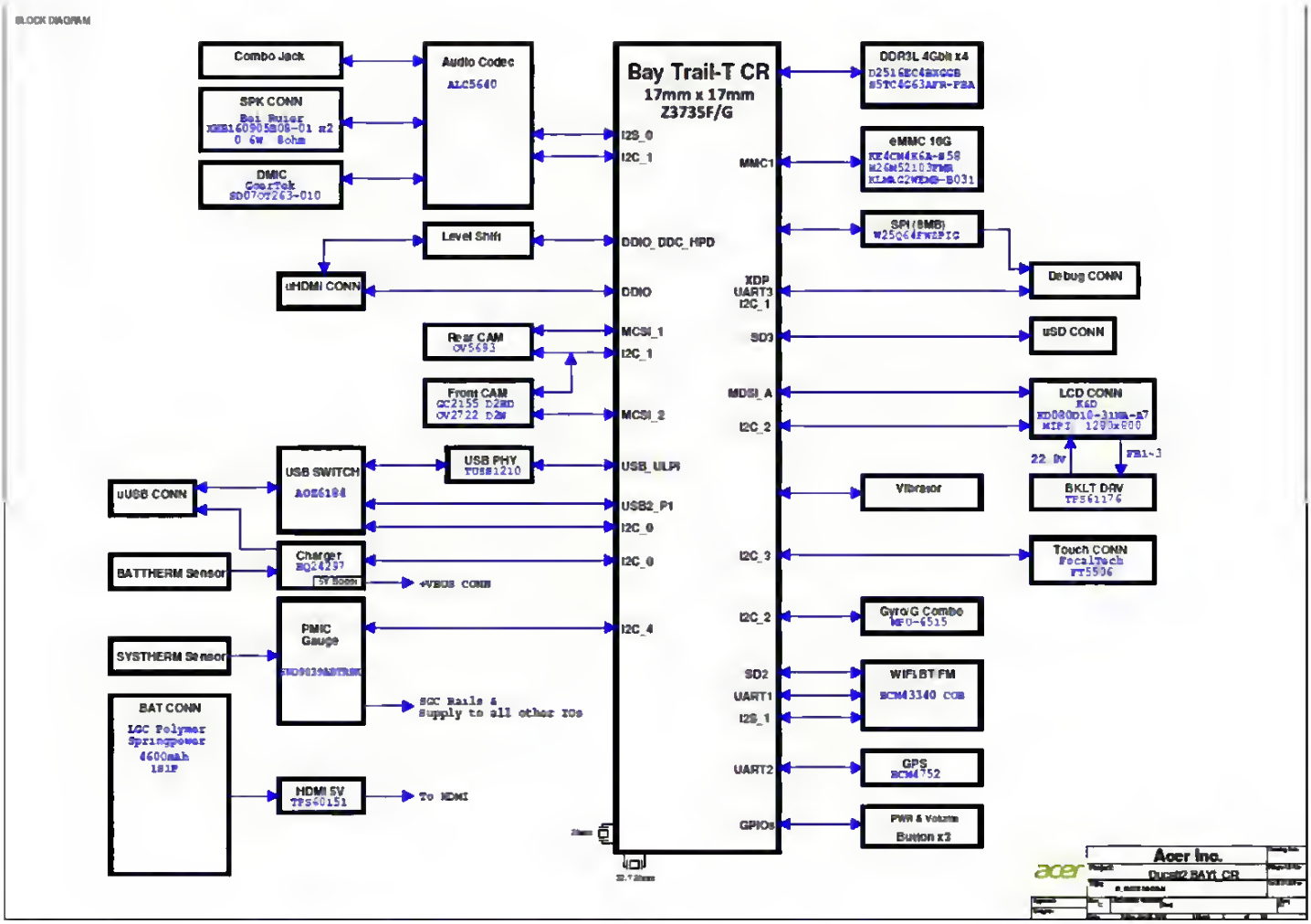


Figure 1-6. System Block Diagram



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# Specifications Table

Computer specifications

| Item | Metric | Imperial |
|---|---|---|
| Dimensions | | |
| Length | 215 mm | 8.46in |
| Width | 130 mm | 5.12in |
| Height (front to rear) | <9 mm | <0.35 in |
| Weight | <360 g | <0.79 lb |
| Input power | | |
| Operating voltage | AC Input: 100~ 240V AC, 50/60Hz / DC Output: 5.35 V | |
| Operating current | AC Input: 0.3A / DC Output: 2.0A | |
| Temperature | | |
| Operating | -25º~ 60ºC | -13º~ 140ºF |
| Non-operating | -30º~ 70ºC | -22º~ 158ºF |
| Relative humidity | | |
| Operating | 0% ~ 80% | |
| Non-operating | 0% ~ 80% | |
| Maximum altitude (unpressurized) | | |
| Operating | 0 ~ 63 cm | 0 ~ 2.48 in. |
| Non-operating | | |
| Shock | | |
| Operating | Amplitude: 105 g | |
| Non-operating | Amplitude: 220 g | |
| Random vibration | | |
| Operating | 1.644 grms | |
| Non-operating | | |

NOTE:
Applicable product safety standards specify thermal limits for plastic surfaces. The computer operates well within this range of temperatures.



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System Board Major Chips

| Item | Specification |
|---|---|
| CPU | CPU 1.83G 2.2W 592B BYT-CR 4 CORE Z3735G Intel |
| Graphics Processor | N/A |
| LVDS transmitter | N/A |
| PMU | N/A |
| DDR3L | 1G LPDDR3 |
| ULPI Phy for USB | N/A |
| Bluetooth | Bluetooth4.0 |
| Wireless | 802 11 a/b/g/n (BRCM 43241) |
| GPS | Yes (Broadcom BCM4752) |
| GPS Low-Noise Amplifier | N/A |
| TOUCH controller | Capacitive type, GFF solution, Driver IC: FT5506 |
| eMMC | 16G |
| CAMERA | 5MP rear camera，2MP front camera |
| Thermal Sensor | N/A |
| Audio codec | Embedded in CPU |
| Audio Amplifier | Embedded in PMU |
| Echo Cancellation | N/A |
| Battery Charger | W25Q64FWZPIG |
| Embedded Controller IC | N/A |
| Compass | N/A |
| Gyro | InvenSense MPU6515 |
| G-Sensor | InvenSense MPU6515 |
| ALS/Proximity | N/A |



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Processor

| Item | Specification |
|---|---|
| CPU | CPU 1.83G 2.2W 592B BYT-CR 4 CORE Z3735G Intel |
| CPU package | BGA. |
| | |

Processor Specifications

| Item | CPU Speed | Cores | Bus Speed (FSB/DMI/QBI) | Mfg Tech | Cache Size | Package | Core Voltage |
|---|---|---|---|---|---|---|---|
| WM8880 | 1.33 GHz最高睿频到1.83GHZ | Four Core | N/A | N/A | N/A | BGA | 0.38V-0.6V |

No CPU Fan for this product

No BIOS Setup Menu for this product

No Keyboard for this product

System Memory-DDR3L

| Item | Specification |
|---|---|
| Memory controller | Embedded in CPU |
| Memory size | 1G LPDDR3 |



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LED 8 0”

| Item | Specification |
|---|---|
| Vendor/model name | DUCATI 2HD |
| Screen Diagonal (mm) | 203.2mm |
| Active Area (mm) | 108.5(W) × 173(H) mm |
| Display resolution (pixels) | 1280 × 3(RGB) × 800 |
| Pixel Pitch (mm) | 0.05(W) × 0.15(H) mm |
| Typical White Luminance (cd/m2) also called Brightness | 250 |
| Contrast Ratio | 700 |
| Response Time (Optical Rise Time/Fall Time) msec | 10/25 |
| Typical Power Consumption (watt) | 0.35W (Typ.) 0.58W(Max) |
| Weight (without inverter) | 112 g (Typ.)/122 g(Max) |
| Physical Size (mm) | 165.75 (W) ×105.39(H) ×3.4(D) mm |
| Electrical Interface | Digital |
| Viewing Angle (degree)<br>Horizontal (Right) CR = 10 (Left)<br>Vertical (Upper) CR = 10 (Lower) | L/R/T/B<br>75/75/70/75 |

No LCD Inverter for this product

Display Supported Resolution (LCD Panel Supported Resolution)

| Resolution | 16 bits | 32 bits | 36 bits | 48 bits | others |
|---|---|---|---|---|---|
| 1280 × 3(RGB) × 800 | | | | | 6bit/8bit |

Front Camera

| Item | Specification |
|---|---|
| Vendor and model | 2MP Camera with Fix Focus (GC2155) |
| Type | 2M |



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Rear Camera

| Item | Specification |
|---|---|
| Vendor and model | 5.0M Pixel Rear camera, Auto Focus (OV5693) |
| Type | 5M |

Mini Card

| Item | Specification |
|---|---|
| Number supported | N/A |
| Features | N/A |

3G Card

| Item | Specification |
|---|---|
| Features | N/A |



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Wireless Module 802.11b/g/n

| Item | Specification |
|---|---|
| Chipset | BroadcomBCM43340 COB |
| Data throughput | 802.11b: 1, 2, 5.5, 11Mbps<br>802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps<br>802.11n: MCS 0~7 HT20 HT40 |
| Protocol | CCXv2/CCXv3/CCXv4/CCXv5, WFAEC |
| Interface | SDIO/SPI |

Battery

| Item | Specification | |
|---|---|---|
| Vendor & model name | | |
| Battery Type | Li-polymer | |
| Pack capacity | 4600 mAh (typical) | |
| Number of battery cell | 1 | |
| Package configuration | N/A | |



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Video Interface

| Item | Specification |
|---|---|
| Chipset | N/A (Graphic function is embedded in CPU) |
| Package | N/A |
| Interface | N/A |
| Compatibility | N/A |
| Sampling rate | N/A |

VRAM

| Item | Specification |
|---|---|
| Chipset | N/A |
| Memory size | N/A |
| Interface | N/A |

USB Port

| Item | Specification |
|---|---|
| USB compliance level | Micro USB2.0 ,Type B support OTG |
| Modes | Device |
| Speed | Low, Full and High |
| Number of USB port(s) | 1 port for Device |
| Location | N/A |
| Output Current | 0A (micro USB port, Device mode) |

HDMI Port

| Item | Specification |
|---|---|
| Compliance level | MICRO HDMI output |
| Data throughput | N/A |
| Number of HDMI port(s) | 1 port |
| Location | N/A |



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AC Adapter

| Item | Specification |
|---|---|
| Input rating | 100Vac to 240 Vac |
| Maximum input AC current | 0.3A(RMS) Max. @100Vac & maximum load |
| Inrush current | The inrush current will not cause any components damage including input fuse and bridge diode. |
| Efficiency | Meet EPS 2.0 Level V<br>The PSU Average efficiency is greater than 73.9%, measurement @ 25%, 50%, 75% and 100% load with input 115VAC and 230VAC. Measured on USB port. |
| Output rating | 5V / 10W |

Card Reader

| Item | Specification |
|---|---|
| Chipset | SD function is supported by CPU |
| Package | N/A |
| Interface | SDIO |
| Maximum supported size | Follow up SD card spec |
| Features | Storage cards with adapter, microSD™ |

System LED Indicator

| Item | Specification |
|---|---|
| System state | N/A |



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# Diagnostic Utilities

## Introduction

The Ducati2_FHD has a test tool in the system

## Diagnostic Tool SOP

1. On the device, go to the applications screen and look for the diagnostic tool named "simple test".

Figure 2-1. Device Applications Screen

2. Tap the "simple test" icon to start the testing process.

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## Main Menu

The diagnostic tool tests the functions of Touch Slope, Ten Touch, RGB, Front Camera, Key, GPS, HDMI, Audio, Battery, BT, G-sensor, motor, memory

Select the function(s) you want to test, and then tap OK to start.

## 1. G-sensor Test

1 Put device on a level surface and stand still.
2 Push gravity calibration button if you want to calibration
3 push reset calibration button if you want to reset calibration

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## 2. Audio

Click audio test,

Frist test WAV,SPEAKER and then test MIC,EARPHONE

Figure 2-4. Speaker audio MIC Earphone channel Test

## 3. LCD Test

Tap each screen to switch to the next colored screen.

The screen sequece are as follows: Red-Green-Blue-Black-Gray 8-Color picture-64 Gray Scale Picture-H Picture-White.

Judge the test result by tapping the "Pass" or "Failure" button Or, press the "Retest" button to do the retest.

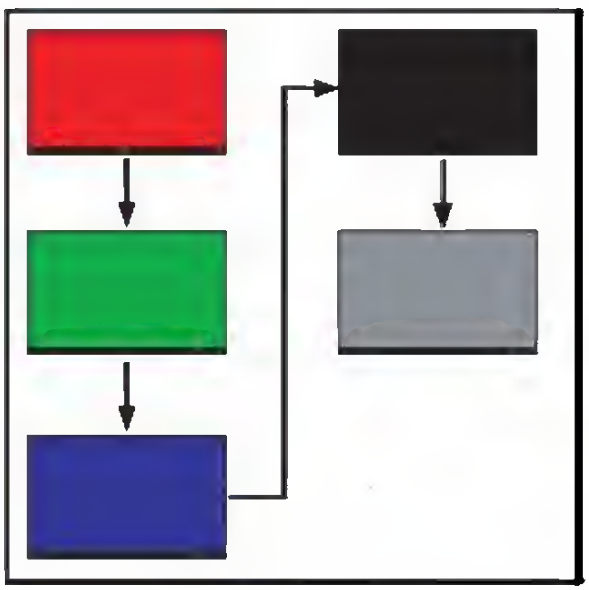

Figure 2-5. LCD Test



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## 4. BT

Press the BT Test

.

Figure 2-6. BT Test

## 5. Camera Test

Aim the front side of the device at an object. Tap "capture" to test the picture taking functionality and the quality of the picture.

Tap "Pass" if the test passes, "Failure" if the test fails, or "Retest" to redo the test.

Press it changing-over front camera and rear camera

Press it Brings up a menu of camera functions

Figure 2-7. Camera Test



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## 6. GPS test

Press GPS and then AutoTest

Figure 2-8 Earphone Test

## 7. HDMI Test

Frist you must connect the HDMI Display, and then press the HDMI test.

Figure 2-9 HDMI Test



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## 8. HDD

Insert an SD card into the device. The test starts automatically.

If the SD card read-write capability is successful, a message appears on the screen and the test automatically closes.

Otherwise, "can't find SD card, test fail" appears on the screen. Tap "Failure" if the test fails or "Retest" to redo the test.

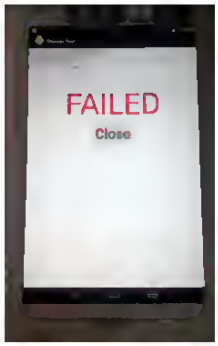


Figure 2-10. SD Card Test

## 9. TP Test

Press TP test ,Draw ten lines, if draw OK then press OK

Figure 2-11. TP Test



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# Jumper and Connectors Location

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# Jumper and Connector Locations

## Mainboard Bottom View

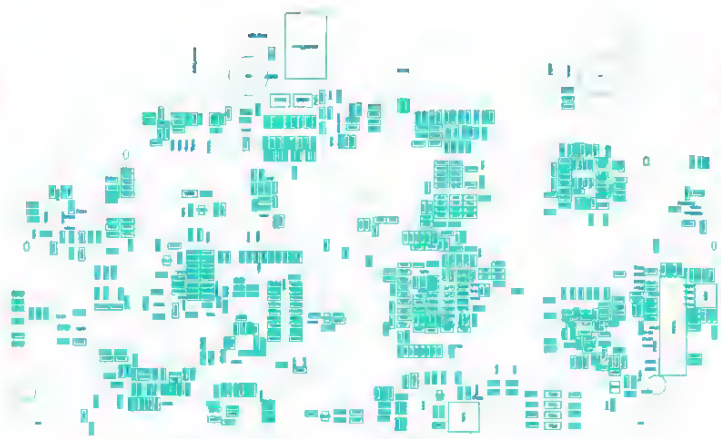

Figure 3-1. Mainboard Top

Table 3-1. Mainboard Top Jumper and Connectors



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## Mainboard Top View

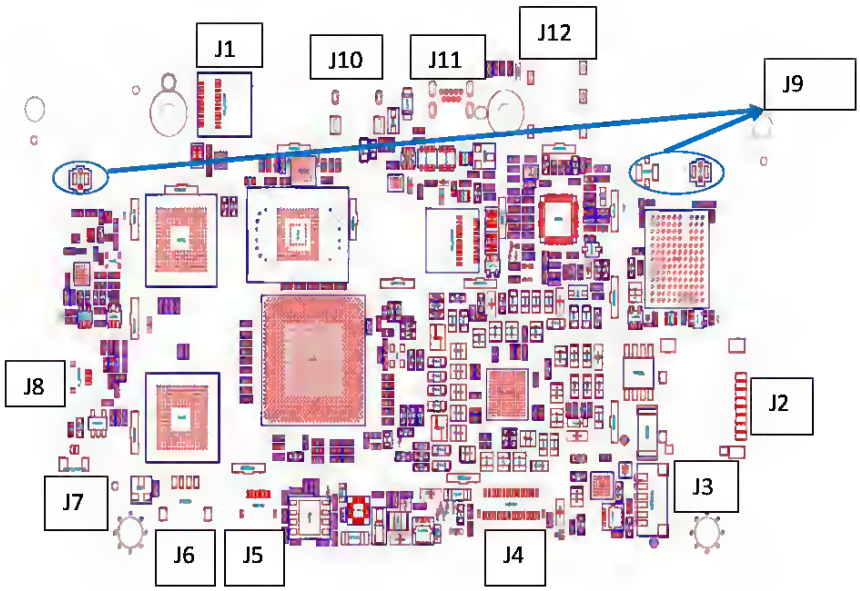


Figure 3-2 Mainboard Bottom

Table 3-2. Mainboard Bottom Jumper and Connectors

| Item | Description | Item | Description |
|---|---|---|---|
| J1 | Front Camera | J4 | LCD Connector |
| J2 | EX SD Card | J5 | Tp Connector |
| J3 | Battery Connector | J6 | Speaker connector |
| J7 | Motor connector | J8 | Key button |
| J9 | WiFi Antenna | J10 | Micro USB |
| J11 | HDMI | J12 | Headphone Jack |



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# Troubleshooting

This chapter contains information about troubleshooting common problems associated with the tablet.

## General Information

The following procedures are guides for troubleshooting computer problems. The step by step procedures are designed to be performed as described.

NOTE
The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

1. Obtain as much detail as possible about the problem.
2. If possible, verify the symptoms by re-creating the failure through diagnostic tests or by repeating the operation that led to the problem.
3. Use Table 4-1 with the verified symptom(s) to determine the solution.

Table 4-1. Verified Symptoms

| Symptoms | See |
|---|---|
| Power on Issues | Figure 4-1. Power On Issues on page 4-3 |
| No Display Issues | Figure 4-2. No Display Issues on page 4-4 |
| LCD Picture Failure | Figure 4-3. LCD Picture Failure on page 4-5 |
| Touch Screen Failure | Figure 4-4. Touch Screen Failure on page 4-6 |
| Internal Speaker Failure | Figure 4-5. Internal Speaker Failure on page 4-7 |
| Internal Microphone Failure | Figure 4-6. Internal Up Microphone Failure on page 4-8 |
| Extend Earphone Failure | Figure 4-7. Extend Earphone Failure on page 4-9 |
| USB Test Failure | Figure 4-8. USB Test Failure on page 4-10 |
| Camera Failure | Figure 4-9. Camera Failure on page 4-11 |
| WiFi Function Test Failure | Figure 4-10. WiFi Function Test Failure on page 4-12 |
| HDMI Test Failure | Figure 4-11. HDMI Function Test Failure on page 4-13 |
| Other Functions Failure | Other Functions Failure on page 4-14 |

4. If the issue is still not resolved, see Online Support Information on page 8-2.



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## Power On Issues

If the system does not power on, perform the following:

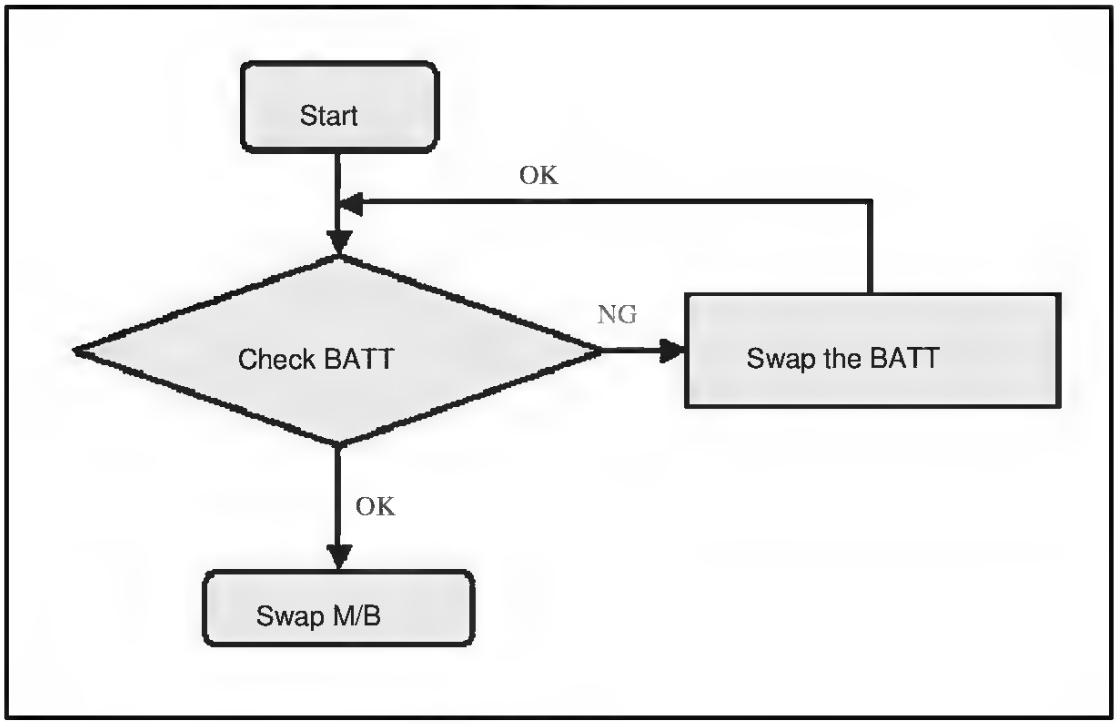


Figure 4-1 Power On Issues



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## No Display Issues

If the system does not display, perform the following:

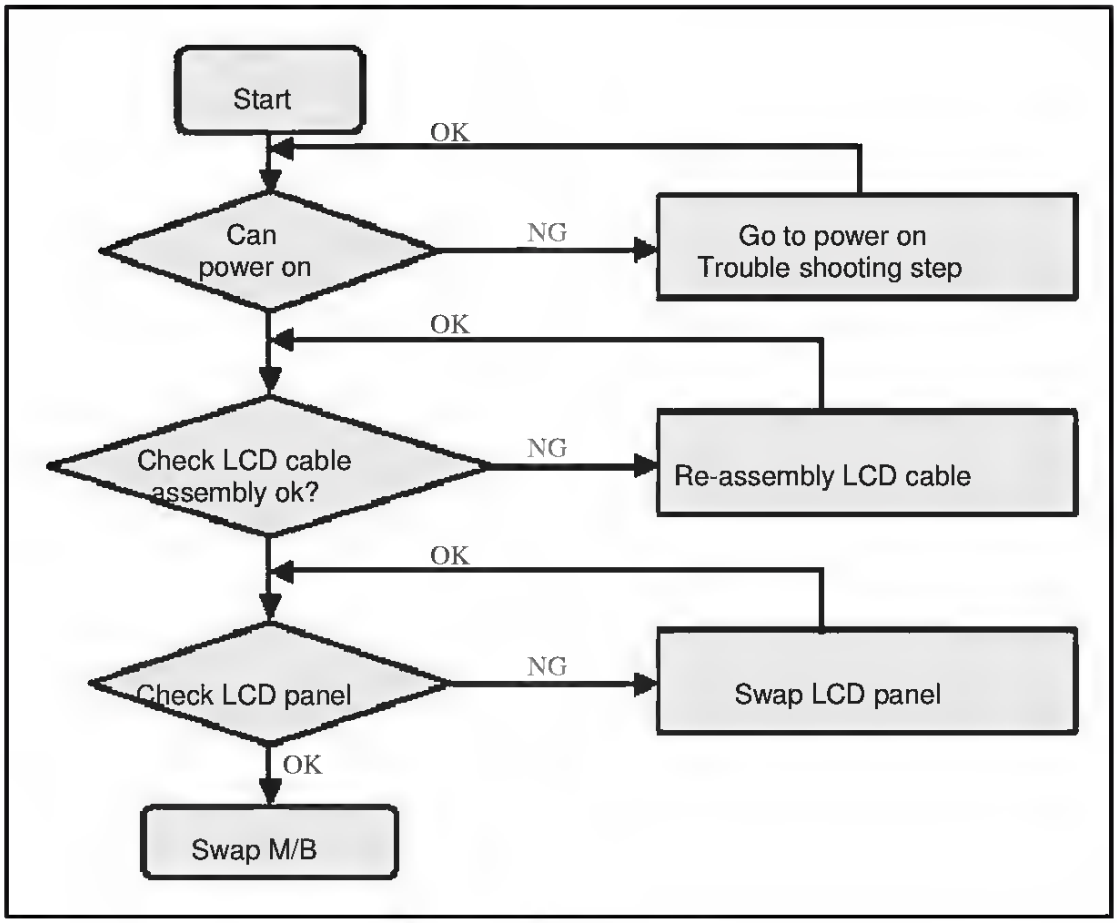


Figure 4-2. No Display Issues



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## LCD Picture Failure

If the LCD picture fails, perform the following:

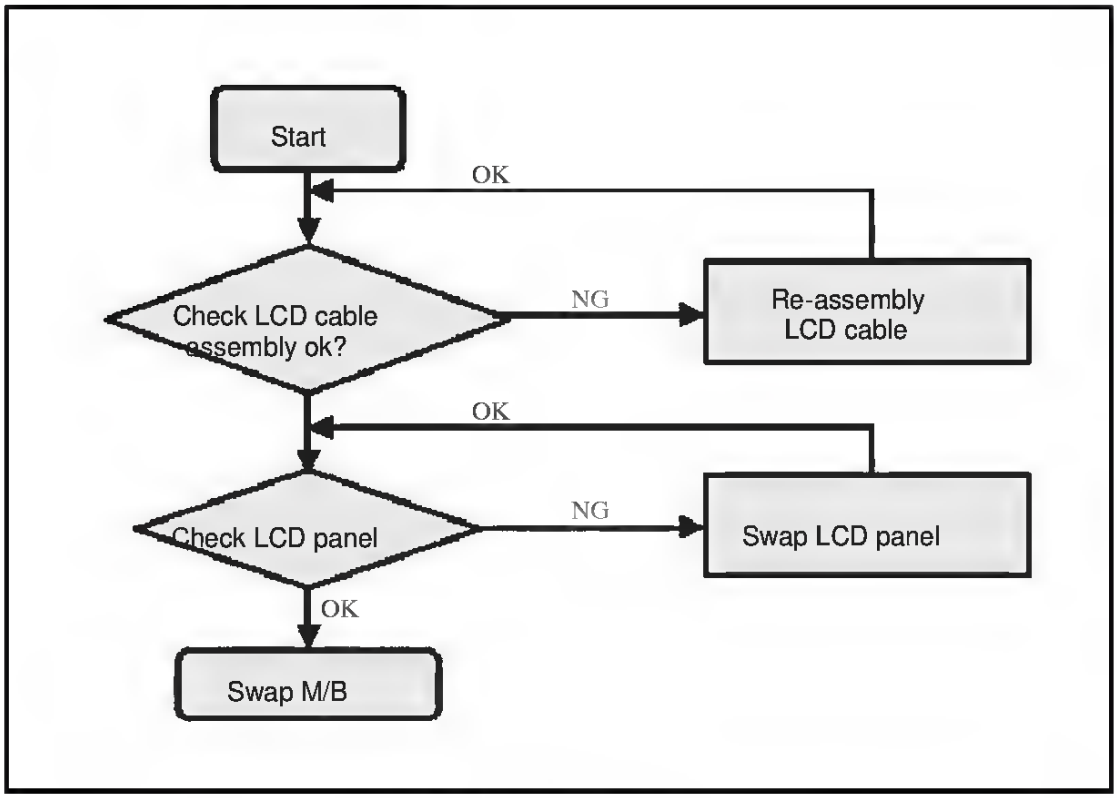


Figure 4-3. LCD Picture Failure



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## Touch Screen Failure

If the touch screen fails, perform the following:

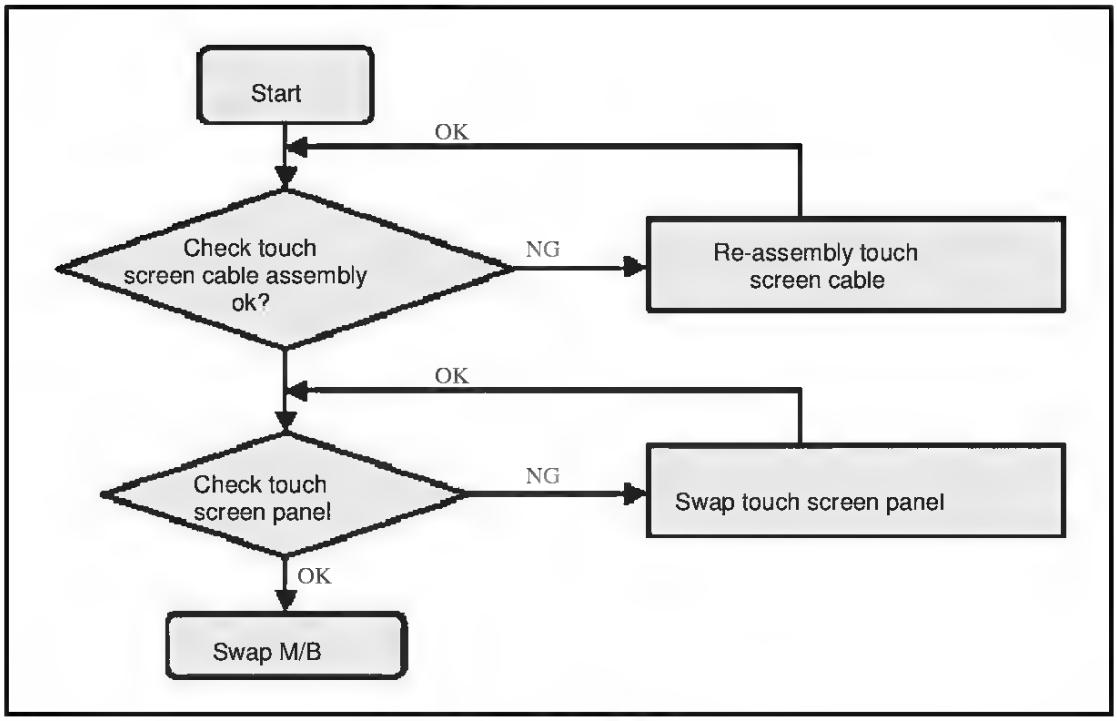


Figure 4-4. Touch Screen Failure



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## Internal Speaker Failure

If the internal speakers fail, perform the following:

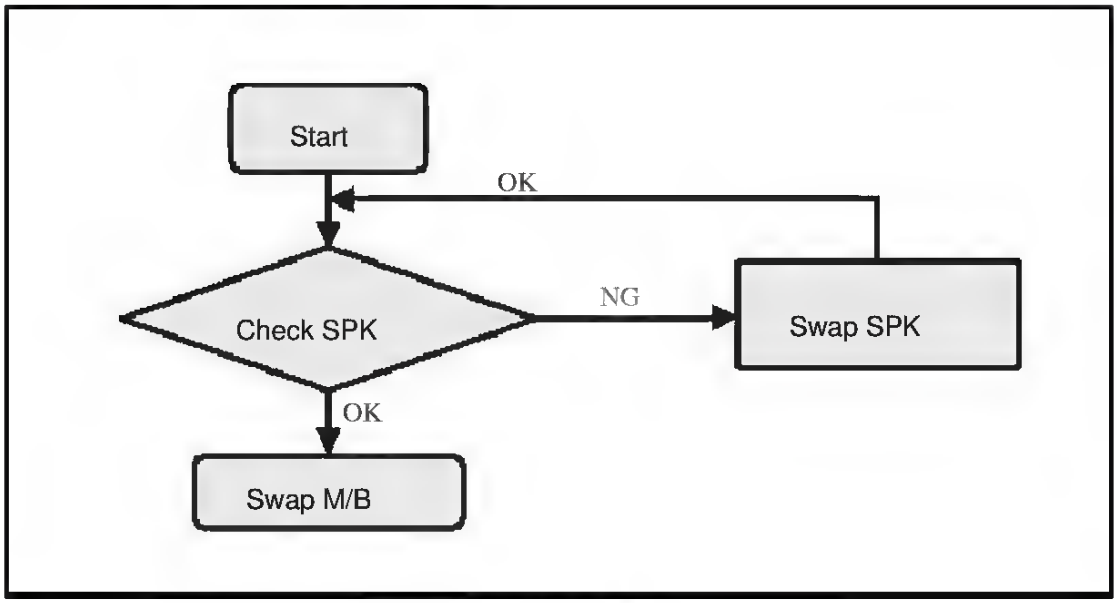


Figure 4-5. Internal Speaker Failure



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## Internal Microphone Failure

If the internal microphone fails, perform the following:

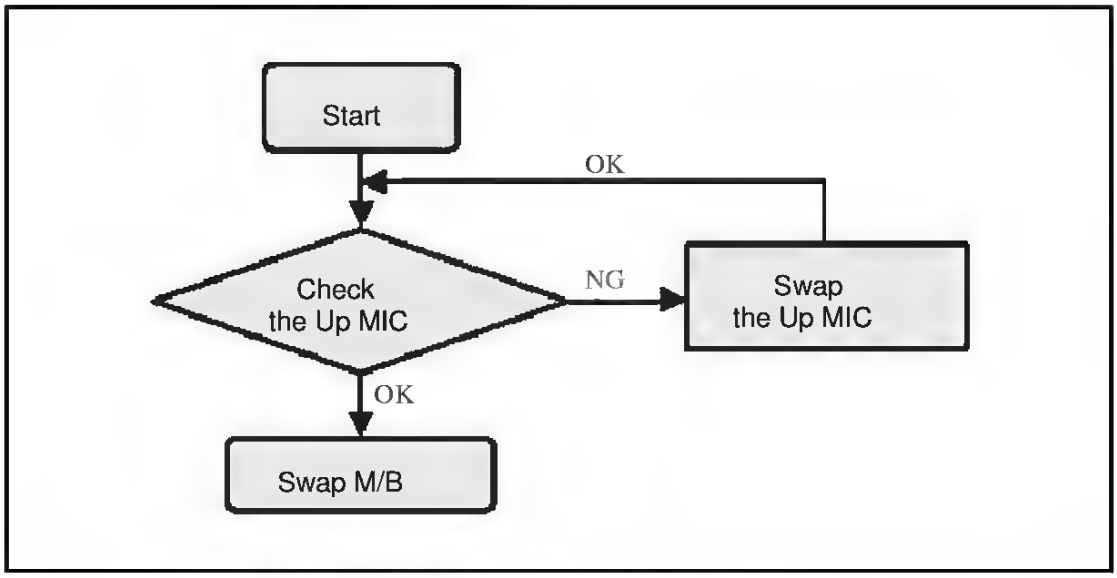


Figure 4-6. Internal Up Microphone Failure



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## Extend Earphone Failure

If the external earphone fails, perform the following:

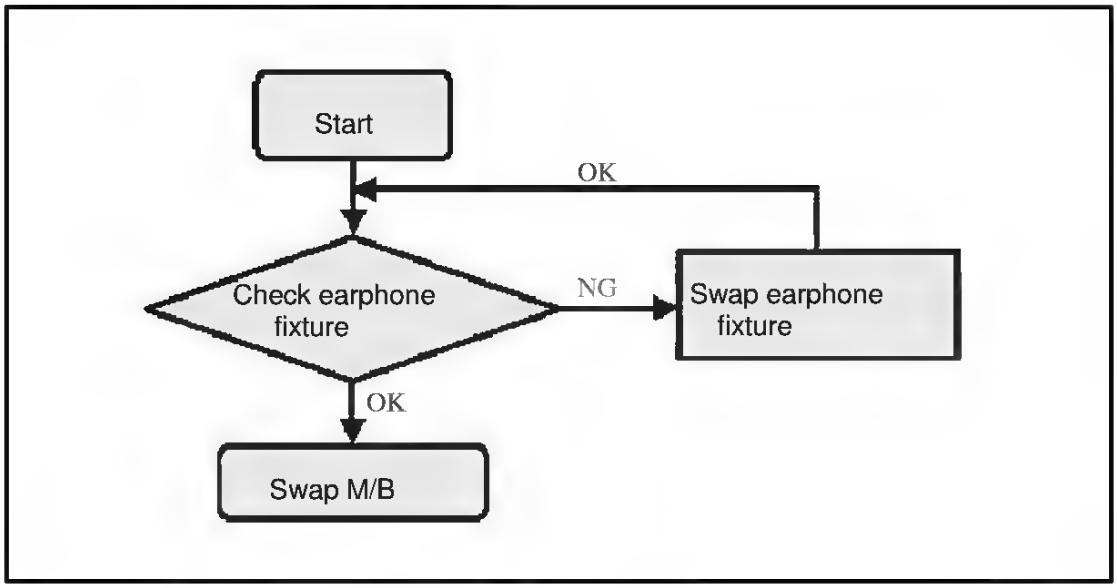


Figure 4-7. Extend Earphone Failure



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## USB Test Failure

If the UBS test fails, perform the following:

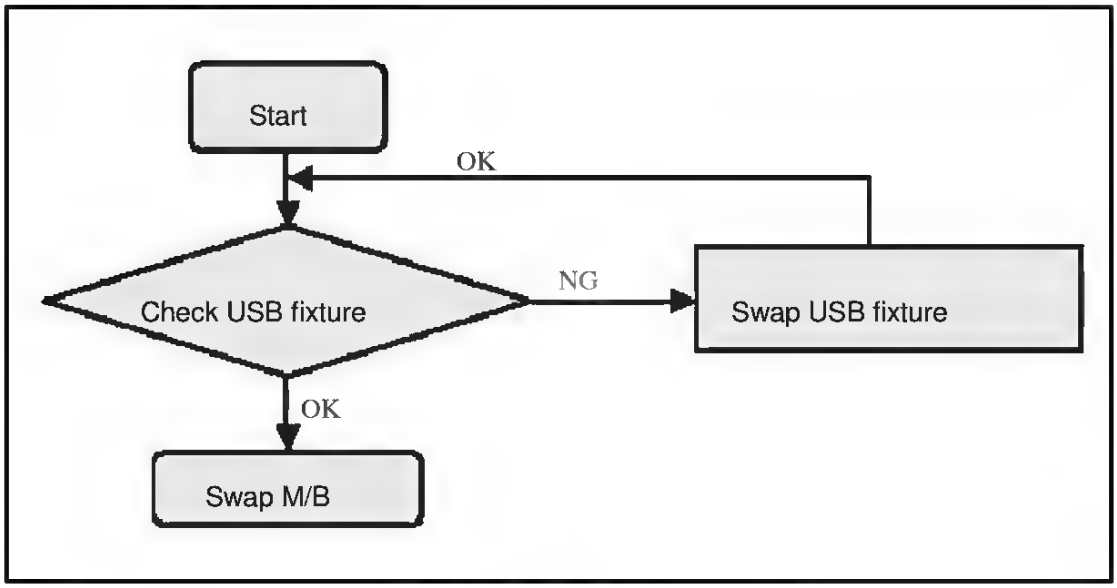


Figure 4-8. USB Test Failure



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## Camera Failure

If the camera fails, perform the following:

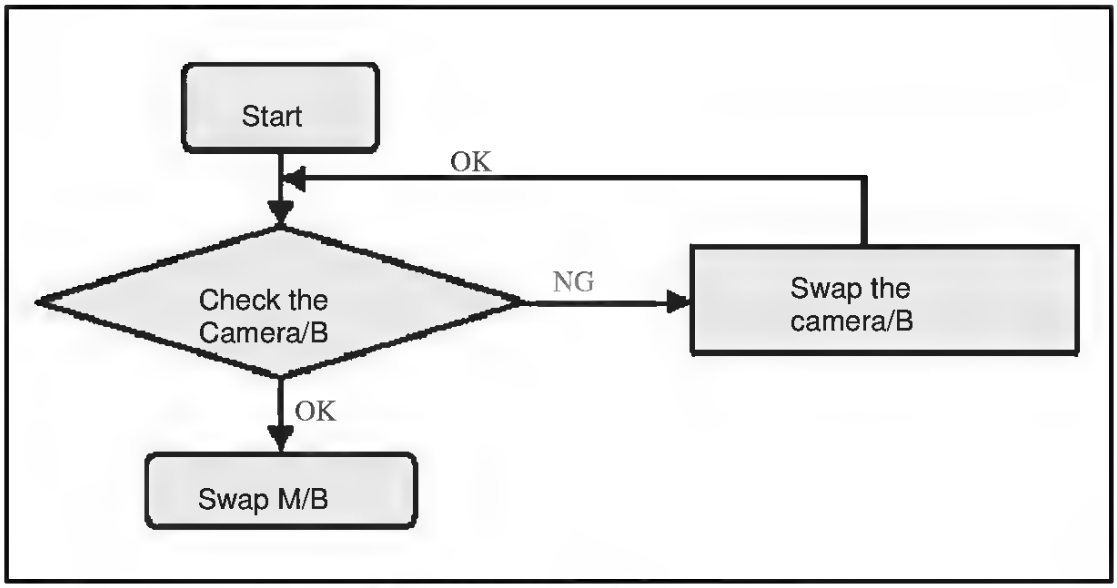


Figure 4-9. Front Camera Failure



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## WiFi Function Test Failure

If the WiFi and Bluetooth function tests fail, perform the following:

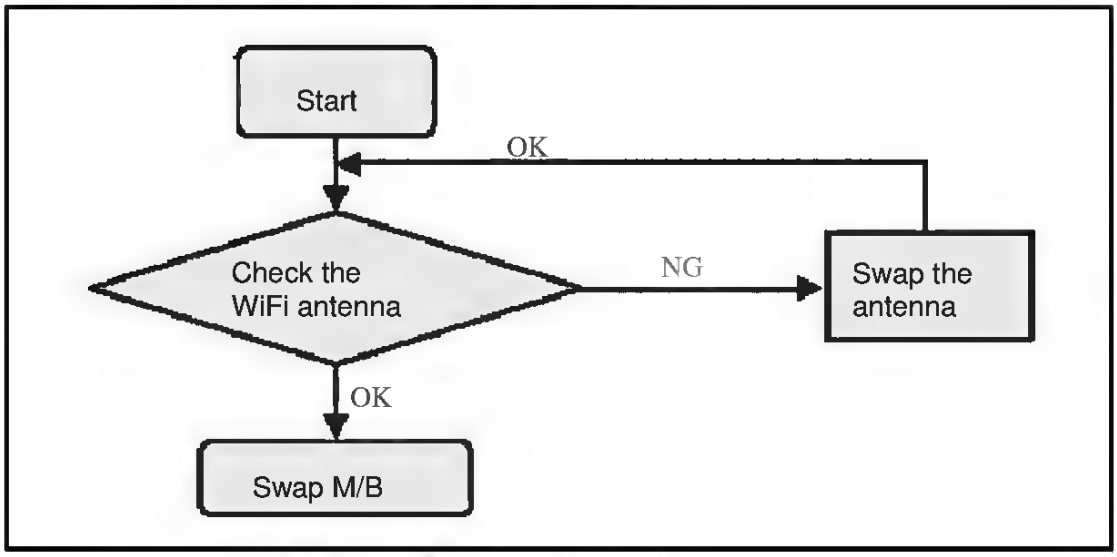


Figure 4-10. WiFi & BT Function Test Failure



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## HDMI Function Test Failure

If the HDMI function fails, perform the following:

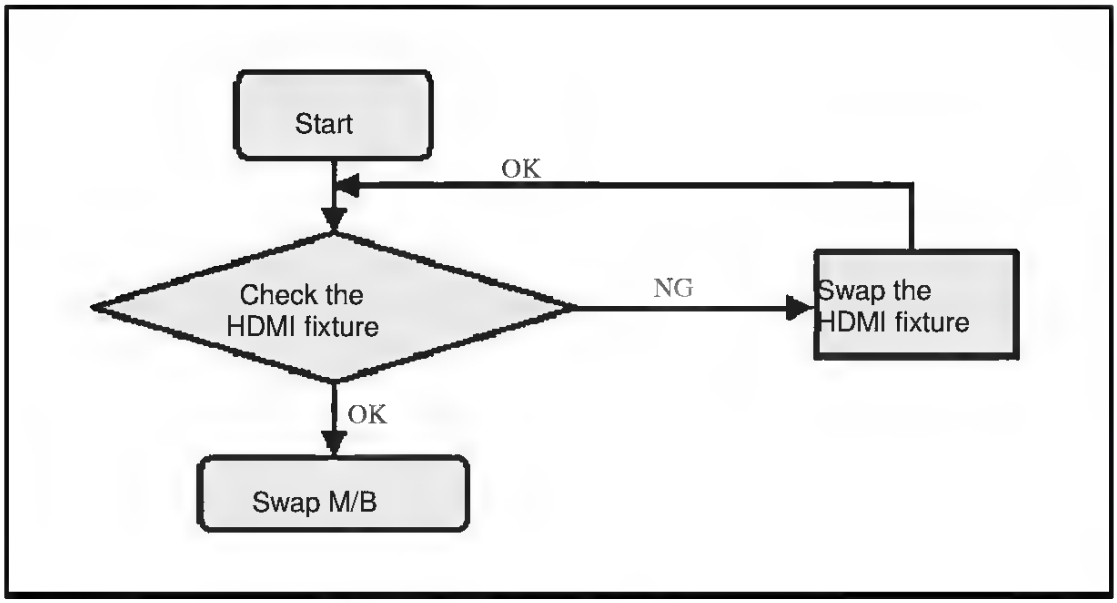


Figure 4-11. GPS Function Test Failure



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## Other Functions Failure

If other functions, such as G-Sensor, SD,BT, Gps, hardware keys, micro-USB, and reset test fail, perform the following:

1. Check the component connection to the mainboard.
2. To test for mainboard fault, swap the mainboard.



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# Service and Maintenance

Introduction . . . . . .5-2

Recommended Equipment . . . . . . 5-2

Maintenance Flowchart . . . . . .5-3

Getting Started . . . . . .5-4

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# Service and Maintenance

## Introduction

This chapter contains general information about the tablet, a list of tools needed to perform the required maintenance and step by step procedures on how to remove and install components from the tablet computer.

## Recommended Equipment

The following tools are required to perform maintenance on the tablet:

- Wrist grounding strap and conductive mat
- Heat blower
- Philips screwdrivers
- Pointed plastic pry or similar object
- Tweezers

Table 5-1. Assembly Screws

| Screw Name | Screw Type | Quantity |
|---|---|---|
| screw M2L3 Black | | 2 |
| screw M2L1.8 white | | 2 |
| screw P1.6L3 Black | | 6 |



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# Maintenance Flowchart

The flowchart in Figure 5-1 provides a graphic representation of the module removal and installation sequences. It provides information on what components need to be removed and installed during servicing

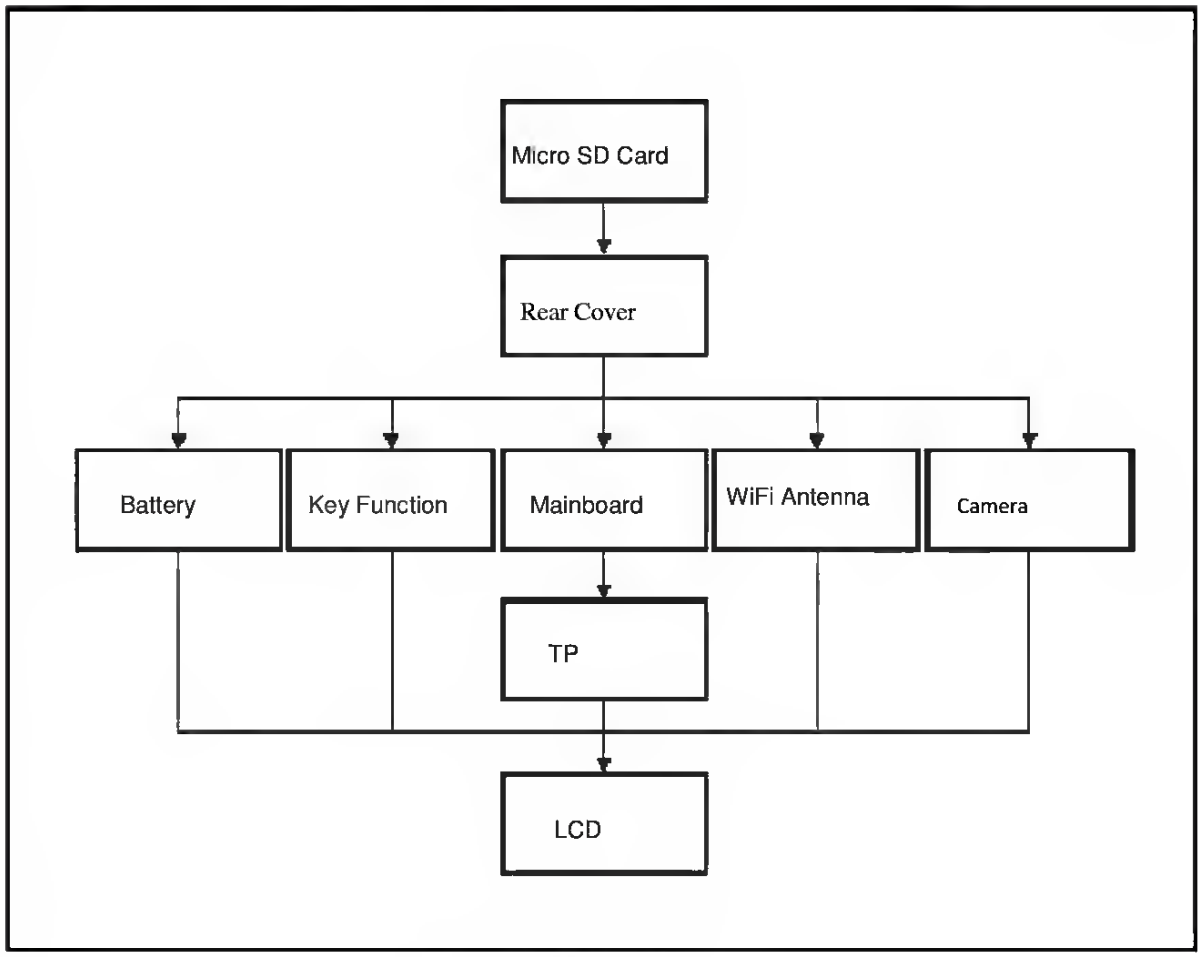


Figure 5-1 Maintenance Flow



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The flowchart (Figure 5-1, page 5-3) identifies sections illustrating the entire removal and installation sequence. Observe the order of the sequence to avoid damage to any of the hardware components.

Perform the following prior to performing any maintenance procedures:

1. Place the system on a flat work surface.
2. Disconnect the AC Adapter and remove all cables from the system and its peripherals.
3. Make sure the system is completely powered down.
4. To make sure the system is completely powered down, press and hold the Power button for 3 seconds.

Figure 5-2 Device Overview with Power Button

5. On the Power Off dialog box, tap OK.



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## Micro SD Card Removal

1. Press the Micro SD Card.

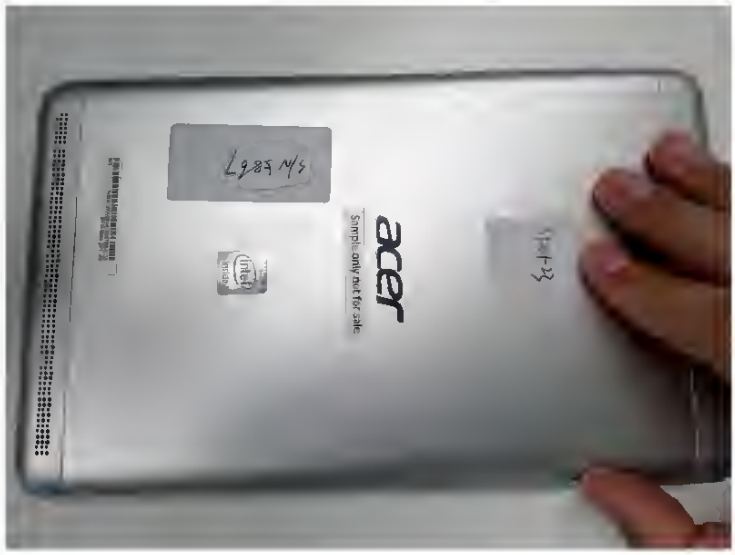

Figure 5-3. Press the Micro SD Card

2. The micro SD card bounce out, and then remove the card.

Figure 5-4 Removing the Micro SD Card



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## Micro SD Card Installation

1 Push the micro SD card into the slot until it clicks into place.

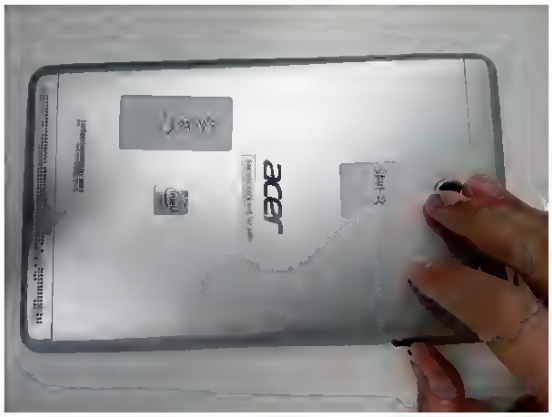

Figure 5-6. Installing the Micro SD Card



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# Rear Cover Removal

Prerequisite: SD Card Removal on page 5-5

1. Up the screen, the left hand grasp product upper portion to make it stable to live, the right hand button stay at the bottom of the cover (the power outlet), pull upward direction, make the cover card hook drop（the only place）.

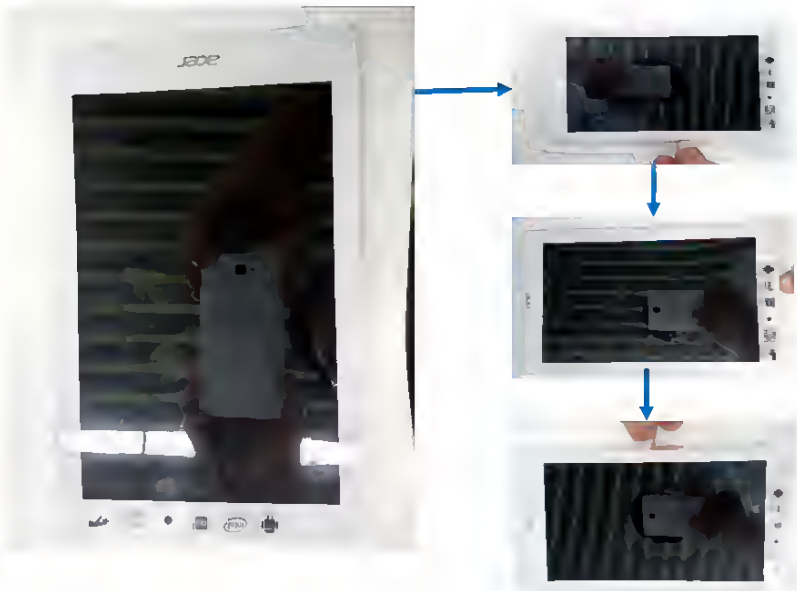

Figure 5-7. Rear Cover Opening

2. Now appears at the bottom of the cover after the opening, but along the opening respectively under cover on both sides of card hook, one by one, gently pull outward, after being left and right card hook out of the open, under the cover can be removed easily..

Figure 5-8. Separate back cover host



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3· Under the lid off, will exhibit 1 ring motherboard eight FPC card buckle upward pull (90 degrees), can take out FPC outward, then here is 2, marked as 4 screws for demolition.

Figure 5-9. Remove the line all interfaces

4. Remove the 2 PCS screws, according to the need to dismantle the mainboard, batteries, speakers, etc；.

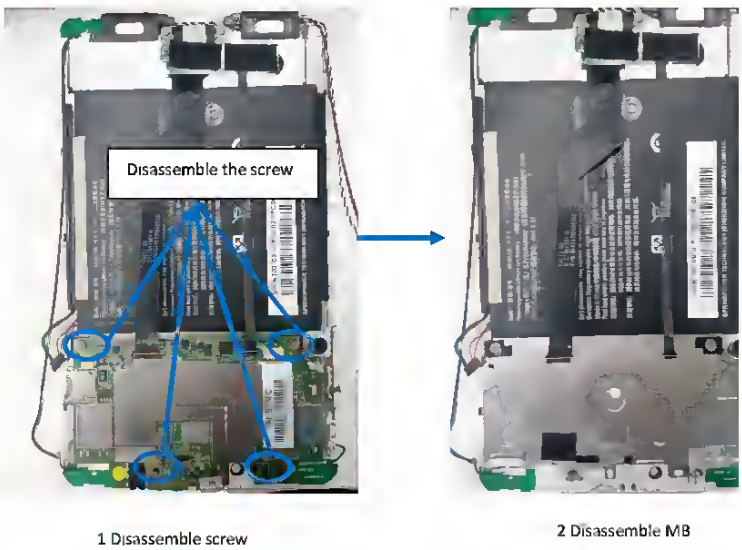


Figure 5-10. Remove the motherboard



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## Remove the speaker ,motor,WIFI ANTENNA

5. Remove the speaker, and then the motor,wifi antenna will be removed.

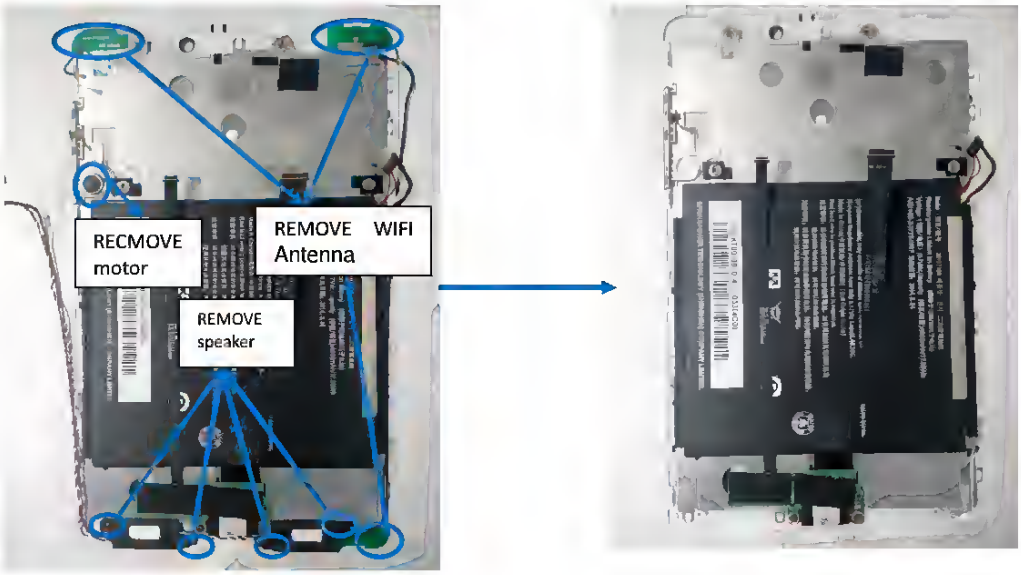


Figure 5-11. Remove the camera module

## TP board Removal

6. Demolition of TP board.

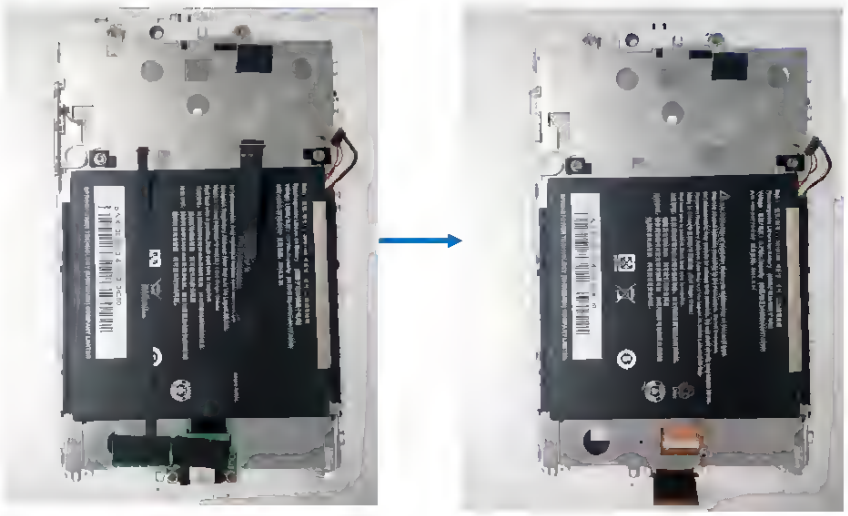

Figure 5-12. Demolition TP board

CAUTION:
Do not Make air heat temperature is too high



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# Battery Removal

7. Demolition of battery , Insert steel rule into the bottom of the battery,loose, and then take down

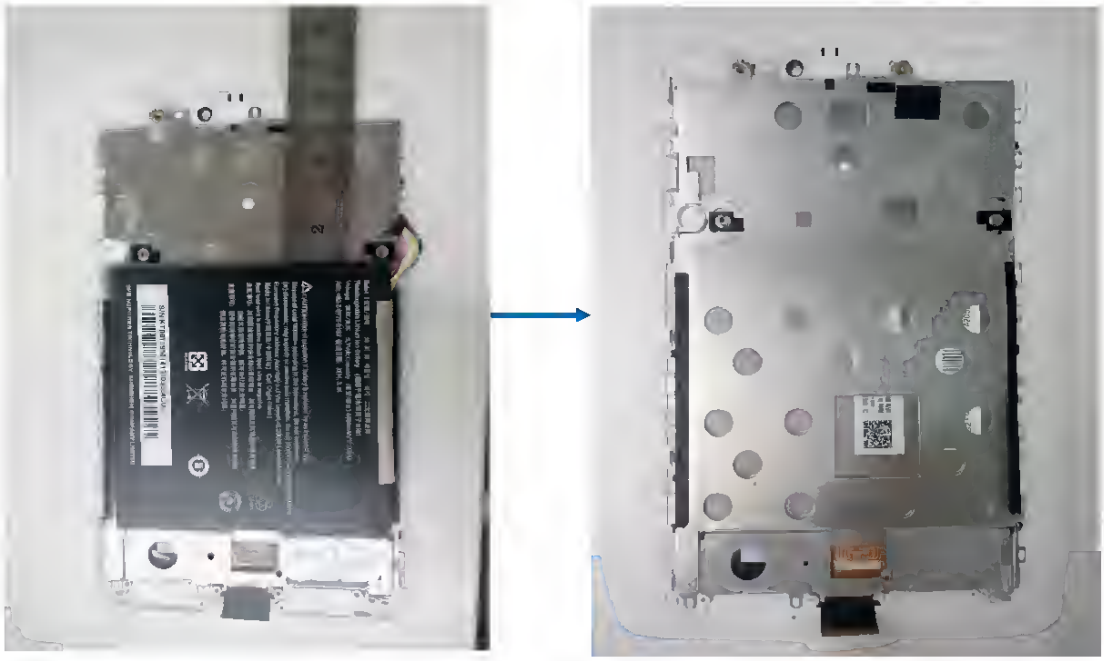

Figure 5-13 Demolition battery

8 Demolition of TP, electric blower first transferred to the 50 to 60 centigrade, and then heating around the perimeter of TP, heated to can use the small iron move after TP, then put the box before the two horns in a downward direction pressure, clamp products, as a fulcrum, to touch the cock, and then use the card to the opening, remove along the whole week

Figure 5-14 Demolition LCD



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9. Here are all the components images.

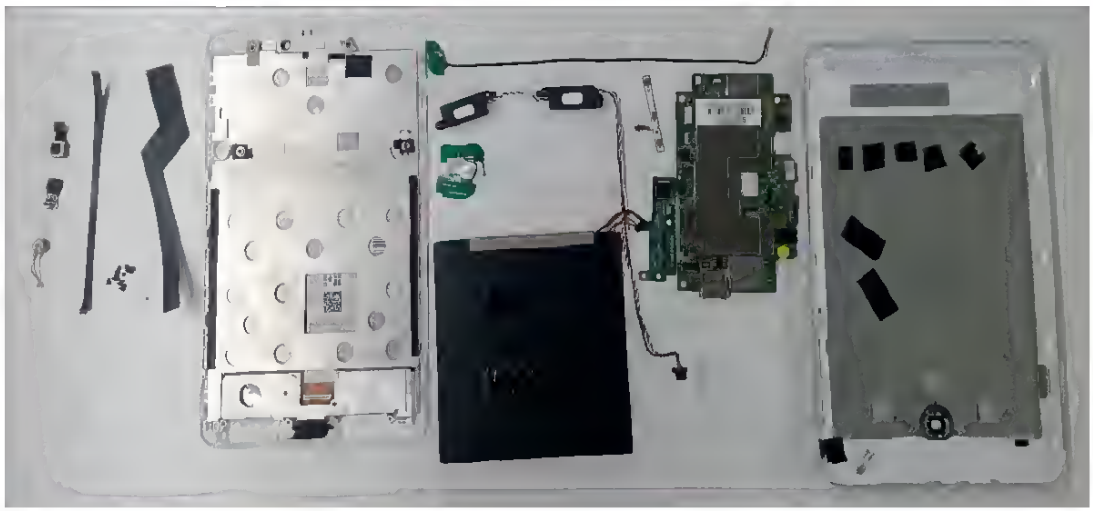

Figure 5-14. All the components


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## Rear cover Installation

1. Before installing the rear cover, make sure the following are installed:
   - Mainboard (if not, perform Mainboard Installation on page 5-29)
   - WLAN Antenna (if not, perform WLAN Antenna Installation on page 5-35).
   - Function Key (if not, perform battery Installation on page 5-39).
   - Camera (if not, perform battery Installation on page 5-39).
   - Battery (if not, perform battery Installation on page 5-39).
2. Connect the TP cable connector to the mainboard connector.

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3. Connect the LCD cable connector to the mainboard connector.

Figure 5-19. Connecting the LCD Cable

4. Connect the speaker cable connector to the mainboard connector..

Figure 5-20. Connect the camera cable



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5. Connect the Key Function cable connector to the mainboard connector.

Figure 5-21. Connect the Key Function cable

6. Press the WIFI antenna connector to the mainboard connector.

Figure 5-22. Press the WIFI antenna connector



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7. Connect the battery to the mainboard connector

Figure 5-23. Installing the Lower Case (2 of 4)

8. Align and snap the left side latches to attach the lower case to the bezel.

Figure 5-24. Installing the Rear Cover (1 of 4)



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9 . Snap the right side latches

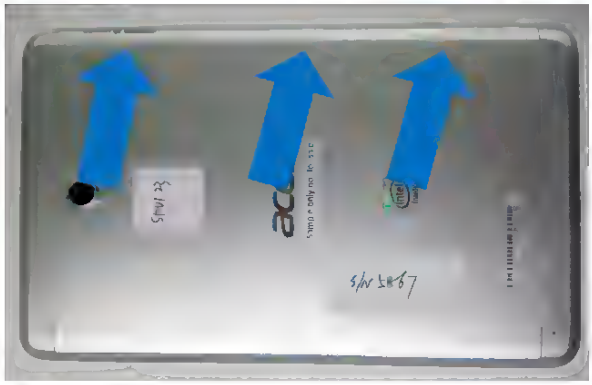

Figure 5-25. Installing the Rear Cover( 2of 4)

10 Snap the bottom side latches.

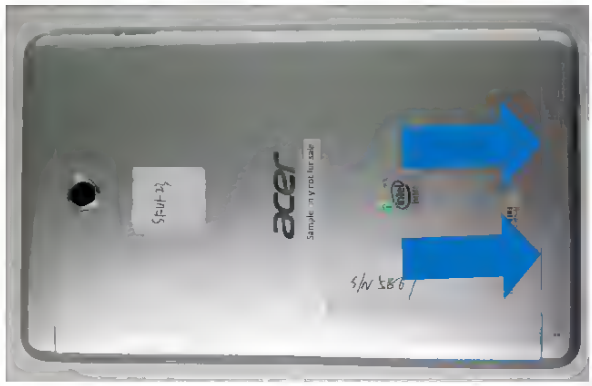

Figure 5-26. Installing the Rear Cover (3 of 4)

11 Snap the top side latches to completely secure the rear cover to the bezel.

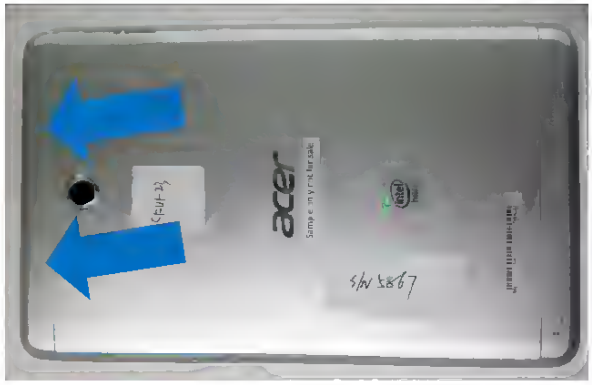

Figure 5-27. Installing the Lower Case (4 of 4)



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## Mainboard Installation

1. Installation the mainboard on the Cover components

Figure 5-28. Installation the mainboard

2. Installation the speaker on the front cover.

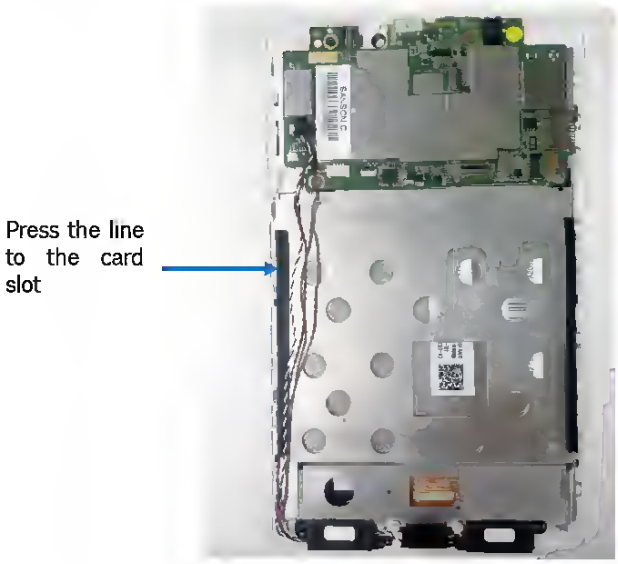


Figure 5-29. Installation the speaker



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## WIFI Antenna Installation

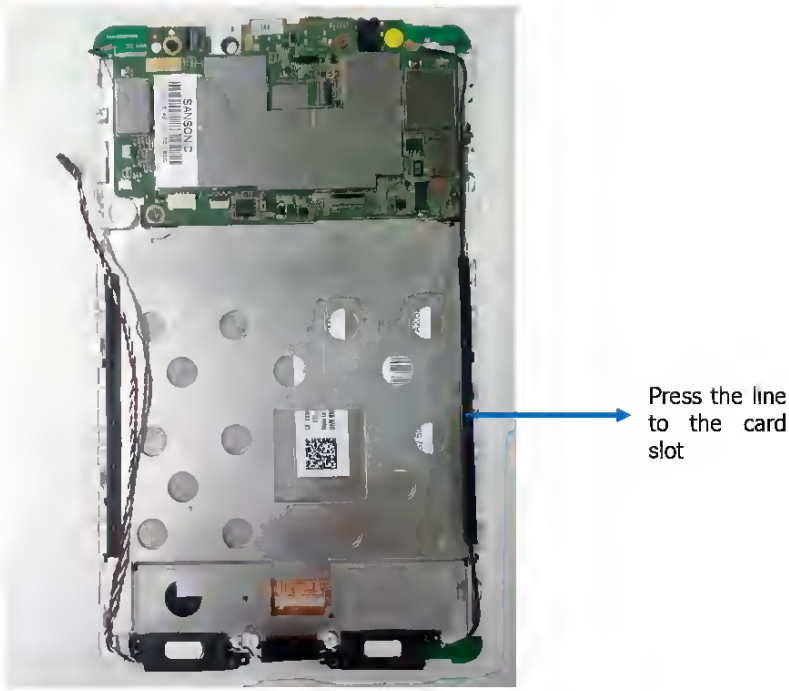


Figure 5-30. WIFI Antenna Installation



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## Key Function Installation

1 Install the Key Function to its slot on the front cover.

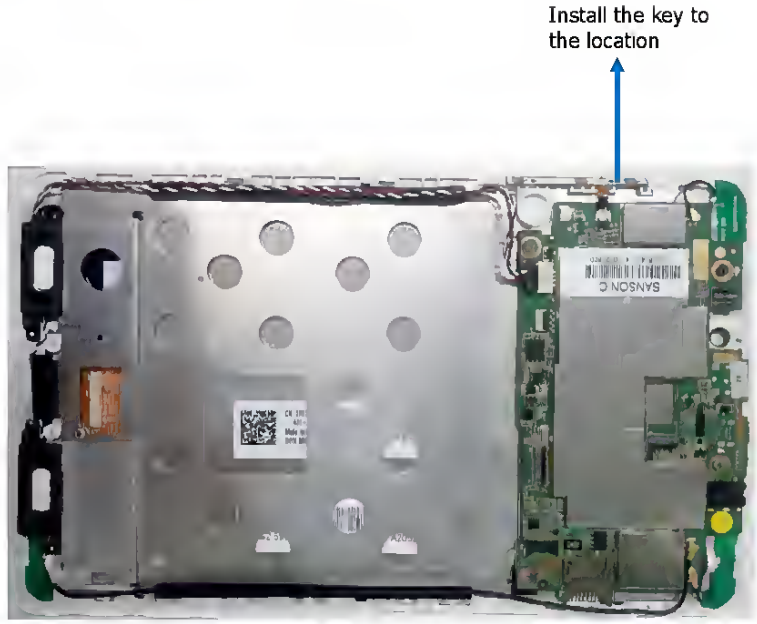


Figure 5-31. Installing Key Function



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## Camera Installation

1 Install the camera to its slot on the front cover.

Figure 5-33. Install the camera



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TP Board install

## Battery Installation

1. Install the battery to its slot on the front cover.

Figure 5-34. Install the battery



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# Field Replaceable Unit List

FRU (Field Replaceable Unit) List . . . . . .6-2

Exploded Diagram . . . . . . 6-3

FRU List . . . . . . .6 -5

Screw List . . . . . 6-7

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# FRU (Field Replaceable Unit) List

This chapter provides the FRU (Field Replaceable Unit) listing in global configurations for the TD070VA1 TAB. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

NOTE

When ordering FRU parts, check the most up-to-date information available on the regional web or channel. Part number changes will not be noted on the printed Service Guide. For Acer Authorized Service Providers, the Acer office may have a different part number code from those given in the FRU list of this printed Service Guide. Users MUST use the local FRU list provided by the regional Acer office to order FRU parts for repair and service of customer machines.

NOTE

To scrap or to return the defective parts, users should follow local government ordinances or regulations on proper disposal, or follow the rules set by the regional Acer office on how to return the defective parts.



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# Exploded Diagram

Table 6-1. Main Assembly Exploded Diagram

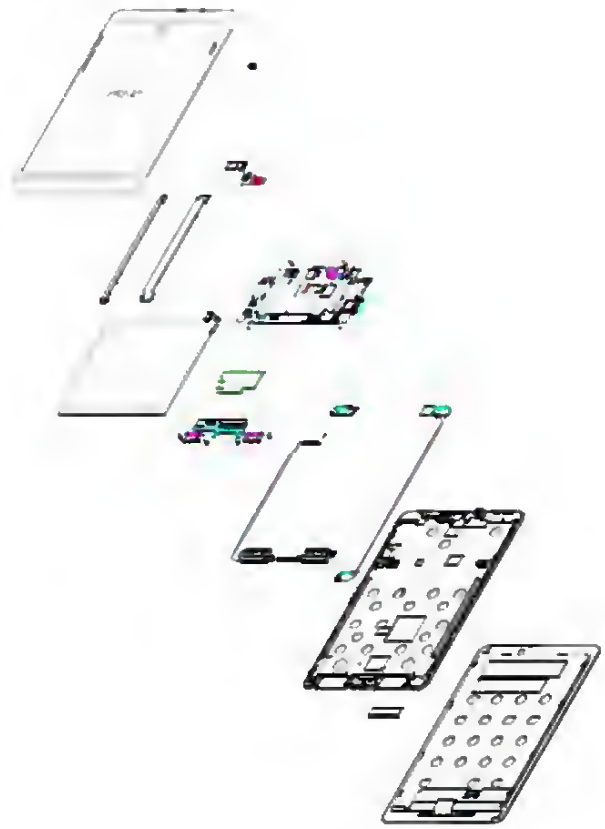

Figure 6-1. Main Assembly Exploded Diagram



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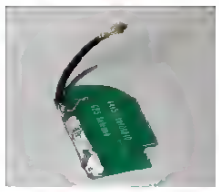
# FRU LIST

| Item | CATEGORY | Acer PN | ODM PN | Acer Description | ODM Description | Picture |
|---|---|---|---|---|---|---|
| 1 | ADAPTER | KP.0100H.001 | 423050100170 | Adapter Chicony Power 10W 5V/2A W010R010L-AC01 LF Fix AC for US | Adapter 10W 5V 2A 2P W010R010L-AC01/U5 Chicony KP.0100H.001 | |
| 2 | PLUG | HC.70211.004 | 423050100230 | | PLUG 2P ADP-104 U5 PLUG Delta HC.70211.004-Acer | |
| 3 | 8ATTERY | KT.00109.001 | 6041420060001 0 | 8attery 5pringpower Technology AP14Z Polymer 1S1P 5pringpower Technology 1 cell 4600mAh Main 8TY for Ducati2 | battery pack li-ion 8LACK R0 HIGHPOWER TJ0808T3 | |
| 4 | CA8LE | N/A | 6441420060001 0 | N/A | usb cable 4pin to 5pin L=1200mm R0 Mingji TJ0808T3 | |
| 7 | GP5 Antenna | N/A | 6445420180001 0 | N/A | GP5 Antenna 20 R0 8oantong TJ0808T5 |  |
| 8 | fpc | N/A | 6442420190004 0 | N/A | fpc TP 8pin 125.7mm 0.5mm R0 weixu TJ0808T5_W | |
| 9 | fpc | N/A | 6442420060007 0 | N/A | fpc MIPI LCM 31pin 130mm 0.3 R0 weixu TJ0808T3 | |
| 10 | FPC | N/A | 6442420060009 0 | N/A | fpc side key 4pin 0.5mm R0 weixu TJ0808T3 | |

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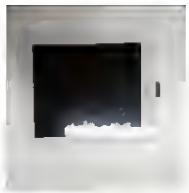
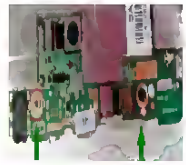
| | | | | | | |
|---|---|---|---|---|---|---|
| 11 | rear cover assy | LZ.21000.007 | 2650420060002 0 | Aluminum w/Camera | rear cover assy PC/AB5+ Al5052 R0 Anodic Oxidation 5ilver Acer china-proj TJ0B0BT3 | |
| 12 | CMO5 camera module | | 4291005B7600 | | CMO5 camera module 2M 3.91mm OTHER No MIC OTHER GNDF140366R guangzhen NC.21411.037 | |
| 13 | CMOS camera module | NC.21411.025 | 4291005B5900 | Chicony Camera 5MAF CH_OV5693 | CMO5 camera module 5M 4.66mm OTHER No MIC OTHER CJAD52B/OV56 | |
| 14 | LCD Moudle | | | | |  |
| 15 | MOTOR | N/A | 455B00001000 | N/A | Ducati2 Tenglong TLC0B27 L=15mm | |
| 16 | MAINBOA RD | | 314201B13011 | | Ducati2 HD 5KU1 FAB C Intel BYT-CR 3735Gx32 DDR HYNIX 1G EMMC 5amsung 16G | |
| 17 | TP board | N/A | 314201B16011 | N/A | Ducati2 HD Touch panel card FT5506_Ducati2_O-Fi lm_0x1B_2014040B | |
| 18 | 5PEAKER | N/A | 70424201B0001 0 | N/A | speaker 0.5WX2 R0 haosheng TJ0B0BT5 | |
| 19 | screw | N/A | 6641420060005 0 | N/A | screw M2L3 Black R0 5anjing TJ0B0BT3 |  |

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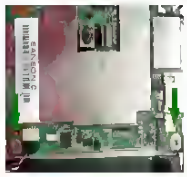
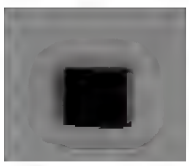
| | | | | | | |
|---|---|---|---|---|---|---|
| 20 | screw | N/A | 6641420060006 0 | N/A | screw M2L1.8 white R0 Sanjing TJ080BT3 |  |
| 21 | screw | N/A | 6641420060007 0 | N/A | screw P1.6L3 Black R0 Sanjing TJ080BT3 | |
| 22 | MISCELLA NEOUS | N/A | 6641420060011 0 | N/A | rubber MIC black rubber R1 Meijiada TJ080BT3 | |
| 23 | MISCELLA NEOUS | N/A | 664142006001S 0 | N/A | rubber front camera R0 QIANGWEI TJ080BT3 | |
| 24 | MISCELLA NEOUS | N/A | 664142006002S 0 | N/A | rubber R0 Dekang TJ080BT3 | |
| 2S | MISCELLA NEOUS | N/A | 6641420180002 0 | N/A | al foil R0 dekang TJ080BT5 | |
| 26 | MISCELLA NEOUS | N/A | 6641420060009 0 | N/A | mylar battery_conn black R0 dekang TJ080BT3 | |
| 27 | MISCELLA NEOUS | N/A | 6641420060010 0 | N/A | rubber battery_conn R0 dekang TJ080BT3 |  |
| 29 | MISCELLA NEOUS | N/A | 6641420060020 0 | N/A | Tape 120mm R0 NA TJ080BT3 | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 30 | MISCELLANEOUS | N/A | 6641420060022 0 | N/A | Fabric Conducter R0 DEKANG TJ080BT3 | |

| Item | CATEGORY | Acer PN | ODM PN | Acer Description | ODM Description | |
|---|---|---|---|---|---|---|
| 1 | screw M2L3 Black | N/A | 66414200600050 | N/A | screw M2L3 Black R0 Sanjing TJ080BT3 | |
| 2 | screw M2L1.8 white | N/A | 66414200600060 | N/A | screw M2L1.8 white R0 Sanjing TJ080BT3 | |
| 3 | screw P1.6L3 Black | N/A | 66414200600070 | N/A | screw P1.6L3 Black R0 Sanjing TJ080BT3 | |

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# Test Compatible Components

Test Compatible Components . . . . . .7-2

Android OS Environment Test . . . . . 7-2

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# Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Android OS environment.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the ICONIA TAB. Compatibility Test Report released by the Acer Mobile System Testing Department.

## Android OS Environment Test

### DUCATI2_FHD

| | | | |
|---|---|---|---|
| **CPU** | **Support Processor** | CPU 1.83G 2.2W 592B BYT-CR 4 CORE Z3735G<br>el | Remark |
| **System Memory** | | 1G LPDDR3 | |
| **Display** | **Panel size** | 8inch ,1280x800 AUO 2.2mm<br>:10,MIPI,Slim Type | |
| **Touchpanel** | **Capacitive** | 10 point support/ GFF H:1.12mm<br>OB:FT5506 ) | GFF with direct bonding |
| **Flash storage size** | **Internal flash on<br>ard** | eMMC 16GB | |
| | **TF card external** | 4G upto 64G | |
| **Audio** | **Mic** | 1x Mic internal (Digital) | |
| | **Speaker** | 2x Channel speaker 0.5W | |
| | **Earphone** | 1x Jack out 3.5mm | |
| **Input Device** | **Vibrator** | Yes | |
| **Wifi** | **Wireless LAN** | 802.11 b/g/n (BroadcomBCM43340 COB) | |
| **Bluetooth** | **Bluetooth** | 4.0 | |
| **GPS** | **Reserve Glonass** | Yes (Broadcom BCM4752) | |
| **RF** | **Antenna** | 2 x2 wifi+BT<br>x GPS | |
| **Button** | **Hot Key** | Power button | |
| | | Volume Up and Down button | |
| **Sensor** | **G-sensor** | Yes,(G Sensor+Gyro Sensor 2 in 1)-<br>venSense MPU6515 | |
| | **Gyroscope** | | |
| **external I/O Ports** | | 1 x Micro USB2.0 ,Type B support OTG | |
| | | 1 x Headphone+Mic 3.5mm standard | |
| | | 1 x Micro HDMI | |
| | | 1 x Micro SD card slot | |
| **Build-in Web Camera** | | 2MP Camera with Fix Focus (GC2155) | |
| | | 5.0M Pixel Rear camera, Auto Focus<br>V5693) | |
| **Power** | **AC Adapter** | Input:100~ 240V AC, 50/60Hz | |
| | | Output:5.35V,2A | |
| | **Battery Pack** | Li-Polymer batery | 1.Video playback: up to 7.5<br>urs when play 720P H.264 |



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| | | | |
|---|---|---|---|
| | | Capacity: 3.7V 33107110mm 4600 mAh | deo playback on system (not reaming, Wifi/3G/BT off, total lution 125 nits)<br>Stand-by on fly mode: up to 4.7 hours (LCD off)<br>Youtube playback 720p video to 6.5 hours via WIFI.<br>Charging time 1 hour to 35% |
| **ID** | **A cover** | Plastic +Painting （Glossy） | |
| | **B cover/Middle ame** | Metal(anodizing+ hair line+CNC）+Plastic + inting（Matte） | |
| **Physical Characteristics** | **Dimension(mm)** | 215 (L) x 130 (W) x 8.5(T) mm | |
| | **Weight** | <360g | |
| **OS Supported** | | Android 4.4, need to be upgrade to KK rough OTA | |
| **Test Criteria** | Test Criteria | refer to Acer test summary | |
| | Thermal Criteria | refer to Acer test summary | |
| | Packaging ngineering equirement | refer to Acer test summary | |
| **Feature** | Acer cloud | Yes | |
| **Standard Accessories** | AC Adapter | YES,USB type | |
| | USB Cable | YES,1.2m | 1: under full load cable end utput voltage shall > 4.6V ystem required)<br>cable and plug thermal rise all < 10 degree C. |
| | Protection Film | Option | |
| | Cover w/o KB (Option) | Option | |
| | BT keyboard | Option | |
| | Other | Acer Micro-HDMI to VGA adapter (model me: NP.OTH11.004) | For test |



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# Introduction

This section describes online technical support services available to help users repair their Acer Systems.

For distributors, dealers, ASP or TPM, please refer the technical queries to a local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers convenient and valuable support resources.

In the Technical Information section users can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical materials.

Also contained on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, do not hesitate to direct any suggestions or comments to us.



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